D0066 NP



1/16

FIG. 1A

| 1 | CGGACGCGTGGCCGCGCCTGGCTGACCTGATCCTGGACCAGTGCCCCGACCGCGCG | 60 |
|-------------------|--|------------|
| 61 | CGCCGGTGCCGCAGATGCTGGCCCAGCCGCAGCGGCTGCTCTTCATCCTGGACGGCGCGGGGGGGG | 12 16 |
| .21 17 | ACGAGCTGCCGGCGCGCGCGCCCTGCACAGACCCCTTCGAGGCGG E L P A L G G P E A A P $\underline{\mathbb{C}}$ T D P F E A A | 18 36 |
| 81 37 | CGAGCGCGCGCGGGTGCTAGGCGGCCTGCTGAGTAAGGCGCTGCTGCCACGGCCCTCC S G A R V 配 G G 随 配 S K A L 配 P T A L L | 24 56 |
| 241 57 | TGCTGGTGACCACGCGCCGCCGCCCCCGGGAGGCTGCAGGGCCGCCTGTGTTCCCCGC $\overline{\mathbb{Z}}$ V T T R A A A P G R $\overline{\mathbb{Z}}$ Q G R L C S P Q | 30 76 |
| 30 1 77 | AGTGCGCCGAGGTGCGCGGCTTCTCCGACAAGGACAAGAAGAAGTATTTCTACAAGTTCT C A E V R G F S D K D K K K Y F Y K F F | 36 96 |
| 361 97 | TCCGGGATGAGAGGAGGGCCGAGCGCCCTACCGCTTCGTGAAGGAGAACGAGACGCTGT R D E R R A E R A Y R F V K E N E T E F | 42 11 |
| 121 | TCGCGCTGTGCTTCGTGTGTGCTGGATCGTGTGCACCGTGCTGCGCCAGCAGC A $\overline{\mathbb{B}}$ C F V P F V C W I V C T V $\overline{\mathbb{B}}$ R Q Q L | 48 13 |
| 181 137 | TGGAGCTCGGTCGGGACCTGTCGCGCACGTCAAGACCACGTCAGTGTACCTGCTTT E L G R D L S R T S K T T T \underline{S} V Y $\underline{\mathbb{H}}$ L F | 54 15 |
| 541 157 | TCATCACCAGCGTTCTGAGCTCGGCTCCGGTAGCCGACGGGCCCCGGTTGCAGGGCGACC I T S V L S S A P V A D G P R L Q G D | 60 17 |
| 501 L77 | TGCGCAATCTGTGCCGCCTGGCCCGCGAGGGCGTCCTCGGACGCAGGCGCAGTTTGCCG | 66 19 |
| 561 197 | AGAAGGAACTGGAGCACTGGAGCTTCGTGGCTCCAAAGTGCAGACGCTGTTTCTCAGCA KEÜEQLE L RGSKVQTLFLSK | 72 21 |
| 721 217 | AAAAGGAGCTGCCGGGCGTGCTGGAGACAGAGGTCACCTACCAGTTCATCGACCAGAGCT K E L P G V L E T E V T Y Q F I D Q S F | 78 23 |
| 781 237 | TCCAGGAGTTCCTCGCGGCACTGTCCTACCTGCTGGAGGACGGCGGGGTGCCCAGGACCG Q E F L A A L S Y L E D G G V P R T A | 8 4 2 5 |
| 341 257 | CGGCTGGCGGCGTTGGGACACTCCTGCGTGGGGACGCCCAGCCGCACAGCCACTTGGTGC A G G V G T L R G D A Q P H S H L V L | 90 27 |



FIG. 1B

| 901 277 | | 960 296 |
|-------------|---|-------------|
| 961 297 | ACTTCGGCTGCATGGTTTCAGAGCGTGTGAAGCAGGAGGCCCTGCGGTGGGTG | 1020 316 |
| 1021 317 | AGGGACAGGGCTGCCCCGGAGTGGCACCAGAGGGGCCCAAAGGGCTCGAGG G Q G C P G V A P E V T E G A K G L E D | 1080 336 |
| 1081 337 | ACACCGAAGAGCCAGAGGAGGAGGAGGAGGAGCCCAACTACCCACTGGAGTTGC T E E P E E E E G E E P N Y P L E L 夏 | 1140 356 |
| 1141 357 | TGTACTGCCTGTACGAGACGCAGGAGGACGCGTTTGTGCGCCAAGCCCTGTGCCGGTTCC Y C 型 Y E T Q E D A F V R Q A L C R F P | 1200 376 |
| 1201 377 | T T T C V C | 1260 396 |
| 1261 397 | | 1320 416 |
| 1321 417 | CGCAGGAGAAGAAGAAGAGCCTGGGGAAGCGGCTCCAGGCCAGCCTGGGTGGCGGCAQQ E K K K K S 🖺 G K R L Q A S L G G G S | 1380 436 |
| 1381 437 | GTTCTCAAGGCACCACAAAACAACTGCCAGCCTCCCTTCTTCATCCACTCTTTCAGGCAA SQGTTKQPPASLLHPLFQAM | 1440 456 |
| 1441 457 | TGACTGACCCACTGTGCCATCTGAGCAGCCTCACGCTGTCCCACTGCAAACTCCCTGACG T D P L \subseteq H $\stackrel{\square}{\mathbb{Z}}$ S S L T L S H C K L P D A | 1500 476 |
| 1501 477 | CGGTCTGCCGAGACCTTTCTGAGGCCCTGAGGGCAGCCCCCGCACTGACGGAGCTGGGCC V C R D L S E A 🗒 R A A P A L T E 💆 G 💆 | 1560 496 |
| 1561 497 | TCCTCCACAACAGGCTCAGTGAGGGGCCTAGCCTGGC L H N R L S E A G L R M 🗒 S E G L A W P | 1620 516 |
| 1621 517 | | 1680 536 |
| 1681 537 | ACCTGGTGGGTATGCTTCGGCAGAGCCCCGGCCCTGACCACCCTGGATCTCAGCGGCTGCC 超VGM型RQSPA型TTLD超SGCQ | 1740 556 |
| 1741 557 | | 1800 576 |

D0066 NP



3/16

FIG. 1C

| 1801 577 | TGCAGACCCTCAGTCTGGCCTCTGTGGAGCTGAGCGAGCAGTCACTACAGGAGCTTCAGG Q T 疆 S 超 A S V E 置 S E Q S L Q E 週 Q A | 1860 596 |
|-------------|---|-------------|
| 1861 597 | CTGTGAAGAGAGCAAAGCCGGATCTGGTCATCACACACCCAGCGCTGGACGGCCACCCAC | 1920 616 |
| 1921 617 | AACCTCCCAAGGAACTCATCTCGACCTTCTGAGGCTCTGGTGGCCAGAGCAGGGTGGAAG PPKELISTF | 1980 625 |
| 1981 | ACCCTAGTCAAAGTCCCTGTGGAGAGAACGGCCCATTCCAAGGGCAGGAGGATATTGCTC | 2040 |
| 2041 | | 2100 |
| 2101 | ACGGCACCCTGCCCCGTCCAGGACAGGCCCAGGACCTGCCCCTCTCTCCACACCTGGGGT | 2160 |
| 2161 | ACCCCTTCTCCCCCAGCCCCACCACTACTCCACCCCACC | 2220 |
| 2221 | CCATTCCCCTTGAAAACACCCCCGACCCCAAGCCACAATAATGACAGCGAGAGCTCCAA | 2280 |
| 2281 | TTAACTAAGCACCTACCTGGCGGCAGAATAACCCTTCACTGCCTGATCCCCATCTGCAGT | 2340 |
| 2341 | GTGGCCCAACAGCCCCCAGAACTATGCCCACATAGACTGGAGGTAGGCAGTTCACCGTCC | 2400 |
| 2401 | CTCCCTGTTAGGAATGAGACCATCCCTGAGGCCTATGGCCCAGGCCCACAGGCGTCCAGTG | 2460 |
| 2461 | TCTGAGATCTTTGGGAAGGGAGACTAGGGCAGGTGGAGACAGCGCAGAACCCCCGTGCTG | 2520 |
| 2521 | GGTGGGAAGCATGACCACATGGTGGGTGAGCAGCCCCCATGCACTGACGGTAAATTCCCC | 2580 |
| 2581 | TGTGGACTCATTTCTGTTGGTTTCTATTACACCTGGCCAGGCGTGGTACAATACAGGTCG | 2640 |
| 2641 | GTGCTCACAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA | |



| 1 MAGGAWGRLACYLEFLKKEELKEROULLANKAHSRSSGEWPROPEKWGG -MASTRCKLARYLEDLEDVELKKFKMHLEDWEPOWGCIPEPROTEKADH MGFNLOALLEQLSQEELSKFRYLETTESPANELOKWPHKEVEKADG | 100 MEVASYLWAQYGEQRAWDWALHEWEQMGLRSLCAQAQEGAGHSPSFPSSP VOLATERMEDFNGEERAWAMAMAMAFAAHNRRDLYEKAKRDEPKWGSDNARV KQLWEQLETHCDSYWWEMASLQWFEKMHRMDLSERAKDEVREWALKSHNK | 101 |
|---|---|--|
| $\begin{pmatrix} 1 \\ 1 \\ 1 \end{pmatrix}$ | (1) (51) (50) (47) | (1) (101) (100) (97) |
| HLRRSI1 caspase_recruitment_protein cryopyrin Nucleotide_Binding_site | HLRRSI1 caspase_recruitment_protein cryopyrin Nucleotide_Binding_site | HLRRSI1 caspase_recruitment_protein cryopyrin Nucleotide_Binding_site |



| 151 | 201 APGTQWPIDDETSGIMYTTEIRERERERGRERGREPMAAMVGRPEGAHSSEOF IEBEWWGLLEYLSRESICKWKKDYRKKYVRSRFQCIEDRNARLGESV KERPPIDWDEMLEREKTEAQDKDNRCRYILKTKEREMWKSWEGDSKEWOV | 300HHPMEPSWRESLCSTWPWKNBDFNQKFTQLLLLQRPHPRSQDPLVKRSW SLNKRYTRURLIKEHRSQQERBQELLAIGKTKTCESPV |
|-----------------------------|---|---|
| (1) | (1) | (1) |
| (151) | (201) | (251) |
| (102) | (111) | (161) |
| (99) | (107) | (157) |
| HLRRSI1 | HLRRSI1 | HLRRSI1 |
| caspase_recruitment_protein | caspase_recruitment_protein | caspase_recruitment_protein |
| cryopyrin | cryopyrin | cryopyrin |
| Nucleotide_Binding_site | Nucleotide_Binding_site | Nucleotide_Binding_site |



FIG. 2A-3

| 350 PDYVEENRGHÜIEIRDLFGPGLDROEPRIVÜLOGAAGIGKRILARRWKEA SPRKMELLFDPDDEHSEPVÜTVVBOGAAGIGKTILARKWMLD | 400 MLA WERGELYGDRFORWFYRSCRELZOSKVVSLAELTIGKDGZATPAPTROILS WASGZLYGDRFDYZFYZHGREYSLWTQRSLEDDINGCPDPNPPTHKIWR WASGZLYQDRFDYZFYZHGREYSLWTQRSLEDDINGCPDPNPPTHKIWR WASGZLYQDRFDYZFYZZRSCRETSREGGPCSEAELWFRDWPETLODDIPHILA | 401 OPORÜLFILDGADELP-ALGGPENAPCTDPFENAGGARÜLGELLSKALLP RPERPLFILDGVDEPGWÜLQEPSSELCLEWSOPPAPLIGSLLGKTHLP KPSRELFEMDGFDELOGABEHIGPLCTDWOKAERGDELLSSLERKKLLP QARKGLFWHDGFDELGNAPGALIEDECCDWEKKKPVPÜLLGSLLNRVÜLP |
|---|--|--|
| (1) | (1) | (4) |
| (301) | (351) | (401) |
| (199) | (241) | (291) |
| (172) | (202) | (251) |
| HLRRSI1 | HLRRSI1 | HLRRSI1 |
| caspase_recruitment_protein | caspase_recruitment_protein | caspase_recruitment_protein |
| cryopyrin | cryopyrin | cryopyrin |
| Nucleotide_Binding_site | Nucleotide_Binding_site | Nucleotide_Binding_site |



FIG. 2A-4

| 451 TALLLWTTRAAAPGRLOGRLCSPOCMEVRGFSDWDWKKYFYKEFRDERRA EASHLTTARMTALONLIPSLEQARWVEVLGFSESSRKEYFYRYFTDERQA EASLLMTTRPVALEWLOHLLDHPRHVEMLGFSEAKREYFFRGEAQA KAALLMTTRPRALRELRILAEBPIXMRVEGFLEEDKRAYFFEDEDQA | 501 ERAÄRBVKENETLFALCFVPEVCWIVCTVLROOBELGRDLSRTSKTTTSV FRAFRLVKSNRELMALCEVPWVSWENCTCLMOOMKRREBLLTSKTTTIN RAAFSLIGGENEVLFINGCFEPRVCWIVCTGLKOOMESGKSLAOTSKTTTIN RAAFSLIGGENFOLGSRPAVCWIVCTTLKLOMERGEDPWPTGLTRT | 551 YLLFITISWLSSAPVADGPRLQGDLRNLCRLAREGVLGRRAQFAEKELEQL CLHWLAQALQAQPLGPQLRDLCSLAAEGIWOKKTLFSPEDLRKH YWFFLSSMLQFRGGSQEHGLCAHLWGLCSLAAEGIWNQKILFEESDLRNH RLSKELSSMLQFRGGSQEHGLCAHLWGLCSLAAEGIWNQKILFEESDLRNH RLKFLSSREPQGAQLRGALRTLSLLAAQGEWAQRSVEHREDLERD |
|--|--|--|
| (53) | (103) | (153) |
| (451) | (501) | (551) |
| (341) | (391) | (441) |
| (301) | (351) | (401) |
| HLRRSI1 | HLRRSI1 | HLRRSI1 |
| caspase_recruitment_protein | caspase_recruitment_protein | caspase_recruitment_protein |
| cryopyrin | cryopyrin | cryopyrin |
| Nucleotide_Binding_site | Nucleotide_Binding_site | Nucleotide_Binding_site |



| 601 ELRGSKVÖTIMFLSKKELPGVIMMENTEVTYÖFTINOSFOEFMAANSYLLEDGGV GLDGAIMSTFLKMGMLQEHPIPMSYSFIHLÖFQEFMAAMSYNLEDEK- GLQKADVSAFLRMN-MFQKEVNÖGEKFYSFIHMMFQEFBAAMYYLLEDEKE GVQESDIRLFLDGD-MLRQDRVSKGEYSFIHLSFQQFMAAMYYLLEDEKE | PRTANGGNGTLLRGDAQPHSHLWLTTRFLFGLLSAERMRDGRGKHSNCIIDDEKTLEMYGTHGLEGASTTRFLJGLLSDEGERE GRTNNPGSRTKLPSRDVTVLLENYGKREKGYLJFVVRFLFGLNNOGERTSY EDRDGHTWDTGDVQKLLSGWERRNPDLJQAGYWSFGLANERRARE | 701 PRINTEGENIVSBRIVKOE ALRWVOGOGCCPGVAPEVTEGAKGLEDTEEPEE WENTFHCRESO - GRNLWOWVPSL QLLLQPHS LEKKINSCKESOQIRLELLKWEVK AKAKKLOEOPSQ LEKKINSCKESOQIRLELLKWEVK KGGHSTVTDLO |
|--|--|--|
| (203) (595) (491) (446) | (253) (642) (540) (495) | (293) (686) (590) (541) |
| HLRRSI1 caspase_recruitment_protein cryopyrin Nucleotide_Binding_site | HLRRSI1 caspase_recruitment_protein cryopyrin Nucleotide_Binding_site | HLRRSI1 caspase_recruitment_protein cryopyrin Nucleotide Binding site |



| • | | | |
|--|---|---------|--|
| FEEGEEPNYPLELLYCLYETQEDAFVROALCRFPELALØRVRFCRMDVAV LESLECLYETRNKTFELOVMAHFEENGNCVETDMELLV LELFYCLYENGEBEVØRAMDNFPRIEINDSTRMDHNV ELLGCLYESQEEBRVKFNMAØFKEISLELNAVNP | 850 LSYCVRCCPACQALRIISCRLMAMOEKKKKSLGKRLOASLGGGSQ CTFCTKFSRHVKKLOIIEGROHRSTWSPSMVMLFRWVPWTDAYWOTLFS- SSFCTENCHRVESLSLGFLHNMPKEEEEEKEGRELDMWQCWLPSSSHAA SSFCTFLOMFRWENIQEMSLQVTKENLEENVTRSESDAEVERSODDQHMTPFWT | 51 | CSHGWNSHET DECEMENSHORD TO STREET OF |
| (343) (716) (626) (576) | (393) (754) (664) (612) | (439) | (803) (714) (662) |
| HLRRSI1 caspase_recruitment_protein cryopyrin Nucleotide_Binding_site | HLRRSI1 caspase_recruitment_protein cryopyrin Nucleotide_Binding_site | HLRRSI1 | caspase_recruiument_protein cryopyrin Nucleotide Binding site |



| 901VLKVMRNIKELDISCNSISHSANKSICKTIRREPLCHESTIT SECRETESVISTESSITEIDISCNSISHSANKSICKTIRREPROLLEMIR SECRETESVISTESSITEIDISDNSIGDEGNKVICETLEHFGONERRIW PMDAHRNICHALREHKTVTYLTLOGNDODEWNPRICENTREPECNIRYI | 1000 LSHCKLEDAVCRDLSEALRAAPALTELGLLENRLSEAGLRWLSEGLAWPO LAGCGLTAEDCRDLARGLRANORLTELDLSFNVLWDAGARHLCORLREPS LGRCGLSHECCFDESINLSSNORLWEIDLSDNALGDFGIRLLCVGLRHLL LWSCSATTOOWADLSLALEVNOSLTCWNLSDN FLEDEGARLIYTTIRHPR | 1051 CRWOTWRWOLPDPQ-RGLOYLWGWLRQSPRLTTLDLSGCOLPABMVWWLC CRLORLOLVSCGLTSDCCQDLASVLSASPSLRELDLSQNNLDDWGVRLC CRLXXLMLVSCGLTSACCQDLASVLSTSHSLTRLYWGENALGDSGVAILC CRLXXLMLVSCGLTSACCQDLASVLSTSHSLTRLYWGENALGDSGVAILC CFLORLSLENCHLTBANCKDLARVLVVSRELTHLCLARNPEGNAGVKFLC |
|--|---|--|
| (439) (803) (725) (712) | (468) (844) (775) (762) | (518) (894) (825) (812) |
| HLRRSI1 caspase_recruitment_protein cryopyrin Nucleotide_Binding_site | HLRRSI1 caspase_recruitment_protein cryopyrin Nucleotide_Binding_site | HLRRSI1 caspase_recruitment_protein cryopyrin Nucleotide Binding site |



| 1100 AVLÖHÇECGLOTLELASVELSEGSLOELQAWKRAKPELWITEPALECHPQ EGLRHPRCKLIRLGLDGTTLSEENROELRAKEPELWITEPALECHPQ EGLRHPRCKLIRLGLDGTTLSEENROELRAKEPELNITESRRKPSWMT EKAKNPOCHICHTWINSCHISVCCSALSSWIETNONLTHLWIRGER EGLRWPECKLOTLVLWNCDETSECCCELERKELOEKSELLCTELGENFEGV | 1101 PREDESTF | 1151 |
|---|-----------------------------|-----------------------------|
| (567) | (617) | (626) |
| (944) | (994) | (1044) |
| (875) | (925) | (975) |
| (862) | (912) | (961) |
| HLRRSI1 | HLRRSI1 | HLRRSI1 |
| caspase_recruitment_protein | caspase_recruitment_protein | caspase_recruitment_protein |
| cryopyrin | cryopyrin | cryopyrin |
| Nucleotide_Binding_site | Nucleotide_Binding_site | Nucleotide_Binding_site |



| HLRRSI1 | (626) | 1250 |
|---|----------------------------|---|
| caspase_recruitment_protein cryopyrin Nucleotide Binding site | (1094) (1022) (1008) | EKNLYRWHFPVAGSZRWPNMGLCFWRREAVTVEIEFCVWDQFLGEINPQH EKPELTVVFEPSW |
| | | 1251 |
| HLRRSI1 caspase_recruitment_protein | (626) (1144) | |
| cryopyrin Nucleotide_Binding_site | (1035) (1034) | |
| | | 1301 |
| HLRRSI1 | (626) | T. PKDADYDT UUT 177 BANDS OD D. T. T. VMT UNA 1. DE TAYART T. VHD 1. UD |
| cryopyrin cryopyrin | (1035) | |
| Nucleotide_Binding_site | (1034) | |



| 1351 | 1401 | 1451 | 1501 |
|--|-----------------------------|-----------------------------|-----------------------------|
| | | | |
| 1 (626) - (1244) E (1035) - (1034) - (| 1 | 1. | 1 |
| | (626) - | (626) - | (626) - |
| | (1294) D | (1344) Q | (1394) R |
| | (1035) - | (1035) - | (1035) - |
| | (1034) - | (1034) - | (1034) - |
| HLRRSI1 | HLRRSI1 | HLRRSI1 | HLRRSI1 |
| caspase_recruitment_protein | caspase_recruitment_protein | caspase_recruitment_protein | caspase_recruitment_protein |
| cryopyrin | cryopyrin | cryopyrin | cryopyrin |
| Nucleotide_Binding_site | Nucleotide_Binding_site | Nucleotide_Binding_site | Nucleotide_Binding_site |

D0066 NP

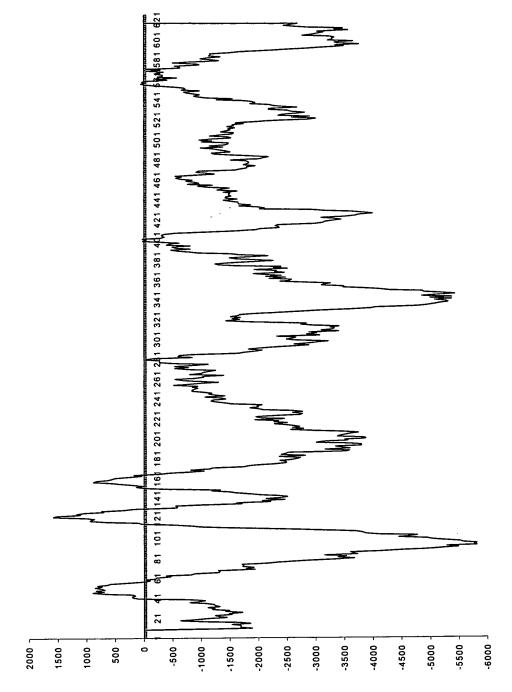




FIG. 5

| Protein | Genbank ID | Identities | Similarities |
|---------------------------------------|-------------|------------|--------------|
| human caspase recruitment protein 7 | gi 10198209 | 36.3% | 44.0% |
| human nucleotide binding site protein | gi 10198207 | 35.0% | 42.2% |
| human cryopyrin protein | gi 17027237 | 35.7% | 46.0% |